

## OXYBUTYNIN – SAFE PRESCRIBING – A LITTLE BIT DRY

- ▶ ENSURE THE INDICATION IS APPROPRIATE – AVOID THE ‘PRESCRIBING CASCADE’
- ▶ ENQUIRE ABOUT EYE HEALTH BEFORE PRESCRIBING
- ▶ START LOW AND GO SLOW – OLDER PEOPLE REQUIRE LOWER DOSES
- ▶ ASK ABOUT ADVERSE EFFECTS AND ACTIVELY MANAGE THESE

Oxybutynin decreases muscle spasms of the bladder, and increases bladder capacity. It is indicated for symptoms of urinary frequency and urgency that result in incontinence.

Oxybutynin can cause classic anticholinergic adverse effects such as dry mouth, blurred vision, urinary retention, constipation, and confusion. These adverse effects may limit titration up to effective doses and reduce adherence to therapy. Advise people to report these adverse effects so they can be effectively managed.

### ENSURE THE INDICATION IS APPROPRIATE

Before prescribing, investigate the cause of the symptoms because they could be medication-related. The ‘prescribing cascade’ can occur when an adverse effect results in another medicine being prescribed leading to an additional issue that needs to be managed.

#### Example of prescribing cascade

A patient prescribed amitriptyline for pain presents with incontinence. Amitriptyline’s anticholinergic effects caused urinary retention leading to overflow incontinence. If this is not recognised, oxybutynin, another anticholinergic medicine might be prescribed, further aggravating the overflow incontinence. This combination can also cause constipation, requiring the addition of a laxative. Finding an alternative analgesic may be more appropriate.

**Note:** Medicines with anticholinergic effects compete for the same receptors as anticholinesterase inhibitors such as donepezil, negating their action. Co-prescription of oxybutynin with anticholinesterase inhibitors should be avoided.

### ENQUIRE ABOUT EYE HEALTH BEFORE PRESCRIBING

Anticholinergic medicines can aggravate glaucoma; oxybutynin is contraindicated if the person has uncontrolled angle-closure glaucoma, and caution is advised if they are susceptible to angle-closure glaucoma.

#### Dry eyes

Anticholinergic medicines often cause dry eyes; consult with an ophthalmologist before prescribing if dry eyes are problematic. Enquire about dry eyes during treatment, offer lubricating eye drops or consider other treatment options if it becomes troublesome. Anticholinergic medicines can also increase light sensitivity, if affected, night driving should be avoided.

### START LOW AND GO SLOW – OLDER PEOPLE REQUIRE LOWER DOSES

Oral oxybutynin undergoes gastrointestinal and hepatic first-pass metabolism producing an active metabolite associated with dry mouth, constipation and dizziness, which can be especially problematic for older adults.

Start with half the usual dose, increase only if necessary and ask about adverse effects at each visit. Use cautiously with cognitive impairment or Parkinson’s disease because anticholinergic medicines can precipitate confusion.

The oxybutynin topical patch may have reduced adverse effects because of lower levels of the active metabolite, but application site reactions and relative cost may limit the patch’s use.

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## OXYBUTYNIN

### ASK ABOUT ADVERSE EFFECTS AND ACTIVELY MANAGE THESE

Many adverse effects are dose-related; consider reducing the dose before using an alternative medicine or formulation.

#### Dry mouth

Dry mouth is the most common and troublesome adverse effect of oxybutynin and is the main reason for discontinuation. Persistent dry mouth can cause ulceration of the gums, tooth decay, and fungal infections. Emphasise the importance of good oral hygiene and recommend saliva substitutes if necessary.

**Note:** Newer antimuscarinic medicines such as solifenacin and tolterodine can also cause dry mouth, but possibly to a lesser extent than oxybutynin.

#### Gastrointestinal effects

Anticholinergic medicines decrease gastrointestinal motility and can cause constipation. Manage proactively with dietary advice and laxatives, where required.

**Note:** Diarrhoea may be a symptom of incomplete intestinal obstruction; if diarrhoea occurs, withdraw oxybutynin.

#### Decreased sweating

Anticholinergic medicines decrease sweating and can cause flushing which may be problematic in hot environments. Warn people about the risk of overheating during exercise or in hot weather because these can lead to heatstroke and fever. Advise caution with hot baths and saunas because of the risk of dizziness or fainting.

#### Drowsiness and confusion

Anticholinergic medicines increase the risk of drowsiness, confusion and memory loss which is especially problematic with older adults. This risk is further increased if more than one anticholinergic medicine is prescribed. These central effects increase the risk of falls; make sure people taking these medicines and their caregivers are aware of this. Alcohol further increases the sedative effect; advise to limit alcohol intake.

#### Adverse effects of anticholinergic medicines

Peripheral effects	Potential complications
Decreased salivation	Dental caries, gum ulceration
Decreased sweating	Hyperthermia
Increased pupil size	Photophobia, precipitation of acute narrow angle glaucoma, difficulty night-driving
Inhibition of accommodation	Blurred vision
Difficulty urinating	Urinary retention
Decreased gastrointestinal motility	Constipation
Central effects	Potential complications
Drowsiness and confusion	Falls

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#### KEY REFERENCES

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3. Fong E, Hay-Smith J, Hyland G. Urinary incontinence in adults. Best Practice Journal 2013;55:28-40 [www.bpac.org.nz/BPJ/2013/October/docs/BPJ55-pages28-41.pdf](http://www.bpac.org.nz/BPJ/2013/October/docs/BPJ55-pages28-41.pdf) (Accessed 05-08-16)

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